

Title (en)
MORPHABLE SHEET STRUCTURE

Title (de)
MORPHBARE BLATTSTRUKTUR

Title (fr)
STRUCTURE DE FEUILLE MORPHABLE

Publication
EP 3657029 A1 20200527 (EN)

Application
EP 18382845 A 20181123

Priority
EP 18382845 A 20181123

Abstract (en)
The proposed morphable sheet structure comprises a succession of adjacent flexible elongated rods (10) laterally connected to each other defining a sheet structure (1), each rod (10) defining a longitudinal axis (A); wherein the rods (10) are grouped in pairs, each pair of adjacent rods (10) are connected to each other through a first connector (11) tightly connected to a second connector (12) complementary with the first connector (11), being the first connector (11) part of one rod (10) of said pair of adjacent rods (10) and being the second connector (12) part of the other rod (10) of said pair of adjacent rods (10); being the first connector (11) and the second connector (12) slidably movable to each other in the direction of the longitudinal axis (A); the first connector (11) and/or the second connector (12) extending along the entire longitude of the rod (10).

IPC 8 full level
F16B 5/00 (2006.01); **F16B 7/04** (2006.01); **F16B 1/00** (2006.01); **F16B 5/06** (2006.01)

CPC (source: EP US)
F16B 5/0032 (2013.01 - EP US); **F16B 7/0433** (2013.01 - EP US); **F16B 2005/0678** (2013.01 - EP); **F16B 2200/77** (2023.08 - EP)

Citation (applicant)
• WO 2016176340 A2 20161103 - UNIV MINNESOTA [US]
• US 2010274350 A1 20101028 - RICHTER JACOB [IL]
• US 6488703 B1 20021203 - KVEEN GRAIG L [US], et al
• US 3836979 A 19740917 - KURLAND R, et al
• US 2014232611 A1 20140821 - OCHOA DANIEL J [US], et al

Citation (search report)
• [XAI] WO 2013102274 A1 20130711 - CFS CONCRETE FORMING SYSTEMS INC [CA]
• [X] GB 2488570 A 20120905 - BURGESS JAMES STEPHEN [GB]
• [X] US 2354485 A 19440725 - SLAUGHTER CHARLES E
• [X] US 4033137 A 19770705 - GEIST JAMES J
• [X] US 4432591 A 19840221 - RINKEWICH ISAAC [IL]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3657029 A1 20200527; EP 3884171 A1 20210929; EP 3884171 B1 20231108; EP 3884171 C0 20231108; ES 2969482 T3 20240520; US 11879497 B2 20240123; US 2022010829 A1 20220113; WO 2020104422 A1 20200528

DOCDB simple family (application)
EP 18382845 A 20181123; EP 19805293 A 20191119; EP 2019081739 W 20191119; ES 19805293 T 20191119; US 201917295966 A 20191119